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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Paper No. 12/7/04

Application Number: 09/400,583
Filing Date: September 22, 1999
Appellant(s): Busche, et al

Lisa Yociss (36,975)
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 10/8/04.

(1) ***Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

(2) ***Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) ***Status of Claims***

The statement of the status of the claims contained in the brief is correct.

(4) ***Status of Amendments After Final***

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) ***Summary of Invention***

The summary of invention contained in the brief is correct.

(6) ***Issues***

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

The rejection of claims 39, 41-44, 53, 55-58 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

5,920,261	Hughes	7-1999
	Toung	12-1997
	The Data Game	8-1998

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 39, 41-44, 53, 55-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hughes (5,920,261) in view of Toung "Wal-Mart Stores, Inc. – Company Report" and further in view of "The Data Game".

Hughes et al. teaches associating spatial relationships with customer data to determine additional information concerning purchases by the customer (see at least col. 16, line 40 – col. 17, line 50, col. 18, lines 19-23, col. 20, lines 10-15, 25-65), recording (identifying) paths of customers (see at least col. 18, lines 15-17, 35-40, col. 15, lines 15-50), associating the locations

of products with the paths of customers as claimed (see at least col. 16, line 40 – col. 17, line 50, col. 18, lines 19-23, col. 20, lines 10-15, 25-65) which employs data mining algorithms to generate input data for forming the set of spatial relationships (see at least col. 17, lines 5-20, 30-45, col. 20, lines 10-15, 25-60) and spatial analysis algorithms to form the set of spatial relationships (see at least col. 20, lines 40-50, col. 19, lines 1-35, col. 13, lines 25-45, col. 18, lines 15-40).

Additionally, Hughes discloses the importance of information on customer activity and product placement:

"Therefore, while it is generally known that the location of merchandise items and the layout of store fixtures impacts the buying habits of consumers, no data exists which tracks these characteristics, nor are there tools to use such data to assign value to location for optimizing space" (col 1, lines 35-40).

Hughes discloses tracking the customer path:

"FIG. 33 shows the display for re-creating the path taken by a customer" (col 3, lines 60-62).

Hughes discloses tracking product placement and product movement (Fig. 27; Fig. 34). Hughes further discloses tracking customer path and product placement (Fig. 33; Fig. 40).

Hughes discloses tracking customer path and the product placement based upon where or when the products were taken off their respective fixtures (product placement):

"In another application the system provides a method of mapping a path that a customer takes as he or she shops in a store. As a customer shops in the store and picks up merchandise, a path of his or her route can be mapped and be used for further analysis. The path is calculated at the point of purchase. FIG. 33 shows an example of a customer path recreation in which the items purchased by the customer are cross-referenced with the time that the items were taken off their respective fixtures" (col 18, lines 15-24).

Hughes discloses tracking the path of a product and customer in real time:

"In yet another application the system provides a method of automatically updating dynamic objects in the virtual environment to reflect the changes in the physical space it is representing. Items that are physically moved from one location to another are automatically updated in the model in near real-time. As an item is moved, the item is monitored more frequently so that a path can be mapped. In general, tagged merchandise items are polled at a certain frequency, for example every 5 minutes, however once an item is no longer within a given proximity to the fixture in which it was on (for example, the item is moved more than a meter away from the fixture) it is considered in motion and the path on which it travels is mapped out. This is illustrated in FIG. 34. The path is generated by plotting its location point, for instance, every 30 seconds or so. By connecting these points, one can visualize the path taken by the item (and the user/customer)" (col 18, lines 24-40).

Hughes discloses that path ('visualize' as stated above) information can be utilized for optimizing and planning purposes:

"The 3D POS system can be exploited to yield a complete set of software tools, collectively called the Intelligent Location System (trade mark), which incorporates facility/store planning, analysis, visualization, and real-time asset/merchandise tracking. The modules of the system are now described" (col 15, lines 40-46).

Additionally, on page 1, Toung discloses the value of data mining and also the value of information useful for better product placement:

"With millions of customer transactions passing through its stores, Wal-Mart has built one of the largest data bases in the country. Through data mining techniques, managers are extracting information about customer buying patterns that allow them to refine merchandise placements. For example, managers discovered that shoppers were more likely to buy travel alarm clocks if they were placed in the luggage department than in the jewelry department."

Additionally, on page 1, The Data Game discloses the value of data mining information on customers:

"The minutia of daily life-what people eat, wear, watch, ride in, play with and think about-is quickly becoming one of the most sought-after commodities in the industrialized world. It is no coincidence that the computer experts who are making it possible have dubbed this business ''data-mining.'' For the corporations that collect, store and analyze it, the information represents a rich vein of raw material that, properly managed, has the potential to make some of the world's wealthiest organizations a great deal wealthier."

On page 2, The Data Game discloses that data mining information related to customer route or path is valuable:

"It claims to be able to trace the exact route each customer has taken through each store, based on what he or she has purchased."

Also, on page 1, Toung discloses profiling by group,

"Furthermore, By being able to sort these patterns by age, income and place of residence, the company can more precisely target each store for the specific demographics of the nearby population,"

and Toung discloses profiling by individual customers,

"Information derived from Wal-Mart's co-branded credit card can also be used to develop individualized customer profiles."

Also, on page 2, The Data Game discloses profiling based on individual customers:

"The second, and more controversial, goal of data-mining is what IBM executives call ''mass customization.'' Translated into everyday language, it means using a variety of sources of information to create dossiers on individuals that will enable IBM'S corporate customers, and a growing number of other companies, to determine whether a particular person is a likely customer and what, exactly, needs to be done to encourage that person's patronage. In the words of Norbert Dawalibi, IBM North

America's vice-president of networking sales: ''The target market is each individual.''

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add Toung and The Data Game's group and individual customer data mining information to Hughes information on customer path, product placement, and product path. One would have been motivated to do this in order to better place and offer products in relation to customer actions.

*(11) **Response to Argument***

Examiner notes that it is the Applicant's claims as stated in the Applicant's claims that are being rejected with the prior art. Also, although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Examiner further notes that while specific references were made to the prior art, that a 35 USC 103 rejection was made and that it is actually also the prior art in its entirety and the combination of the prior art in its entirety that is being referred to.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871.(CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

On page 4 of the Appellant's Appeal Brief, Appellant states:

"Toung does not teach generating data relationships that associate individual customers with information related to that individual. Toung teaches using data mining to determine buying

patterns about shoppers in general, as a group. Nothing in Toung teaches data relationships that associate individual customers with information related to the individual customers.

Therefore, Toung does not supply the feature of data relationships that associate individual customers with information related to the individual customers that the Examiner appears to believe is missing from Hughes. Therefore, the combination of Hughes, Toung, and Data Game does not render Applicants' claims unpatentable. The combination does not describe, teach, or suggest all of the features of Applicants' claims."

However, on page 1, Toung discloses profiling by group,

"Furthermore, By being able to sort these patterns by age, income and place of residence, the company can more precisely target each store for the specific demographics of the nearby population,"

and Toung discloses profiling by individual customers,

"Information derived from Wal-Mart's co-branded credit card can also be used to develop individualized customer profiles."

Also, on page 2, The Data Game discloses profiling based on individual customers:

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On page 4 of the Appellant's Appeal Brief, Appellant states:

"Applicants' claim associating customer paths through the retail space with product placement. Hughes teaches calculating a customer's path using time of movement of an item. Associating a customer path with product placement is not the same as calculating a customer's path using time of movement of an item."

On page 5-6 of the Appellant's Appeal Brief, Appellant states:

"Hughes does not teach an affirmative action of generating spatial relationships that include associations of customer paths with product placement."

On page 6-7 of the Appellant's Appeal Brief, Appellant states:

"Data Game does not describe how the route was reconstructed. Data Game does not state that the route is reconstructed using product placement."

On page 7 of the Appellant's Appeal Brief, Appellant states:

"The combination of Hughes, Toung, and Data Game does not describe, teach, or suggest Applicants' claims. The combination does not describe, teach, or suggest generating data relationships using data mining techniques where these data relationships associate individual customers with information related to the individual customers, or generating spatial relationships using data mining techniques where these spatial relationships include relative placement of products within the retail space and associations of customer paths through the retail space with product placement within the retail space. Therefore, the combination does not render Applicants' claims unpatentable."

However, Hughes discloses the importance of information on customer activity and product placement:

"Therefore, while it is generally known that the location of merchandise items and the layout of store fixtures impacts the buying habits of consumers, no data exists which tracks these characteristics, nor are there tools to use such data to assign value to location for optimizing space" (col 1, lines 35-40).

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Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add Toung and The Data Game's group and individual customer data mining information to Hughes information on customer path, product placement, and product path. One would have been motivated to do this in order to better place and offer products in relation to customer actions.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

AO

December 8, 2004

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